


START**ENGINEERING CHANGE NOTICE**Page 1 of 21. ECN **607432**Proj.
ECN

2. ECN Category (mark one)		Supplemental <input type="checkbox"/>	Change ECN <input type="checkbox"/>	Supersedeure <input type="checkbox"/>
Cancel/Void <input type="checkbox"/>		Direct Revision <input checked="" type="checkbox"/>	Temporary <input type="checkbox"/>	Discovery <input type="checkbox"/>
3. Originator's Name, Organization, MSIN, and Telephone No. L.C. Hulstrom 300 Area Source Investigation & Remediation Projects H6-03, 376-4034				4. Date June 14, 1994
5. Project Title/No./Work Order No. Data Validation Summary Report - 300-FF-5 Operable Unit Round 6 Groundwater		6. Bldg./Sys./Fac. No. N/A		7. Impact Level N/A
8. Document Number Affected (include rev. and sheet no.) WHC-SD-EN-TI-173, Rev. 0, & 0-A		9. Related ECN No(s). 198009		10. Related PO No.
11a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 11b) <input checked="" type="checkbox"/> No (NA Blks. 11b, 11c, 11d)	11b. Work Package Doc. No. NA	11c. Complete Installation Work NA _____ Cog. Engineer Signature & Date	11d. Complete Restoration (Temp. ECN only) NA _____ Cog. Engineer Signature & Date	
12. Description of Change A minor modification to Sheet 2 of 3 for Table 2-1 (trichloroethene value for sample B095M3 was changed from 3U to 10U), plus a correction to Table 4-1 where the results for total uranium were erroneously reported as pCi/L instead of the correct units of ug/L.				
				
13a. Justification (mark one)		Criteria Change <input type="checkbox"/>	Environmental <input type="checkbox"/>	Fac. Alter. Const. <input type="checkbox"/>
Design Error/Omission <input type="checkbox"/>		Design Improvement <input type="checkbox"/>	As-Found <input checked="" type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>
13b. Justification Details Additional review by WHC and subcontractor staff during preparation of the Phase II RI report identified two tables that needed minor revision.				
14. Distribution (include name, MSIN, and no. of copies) L. C. Hulstrom (H6-03, 1 copy), EDMC (H6-08, 2 copies), Central Files (L8-04, 2 copies), ERC (H6-06, 1 copy)				RELEASE STAMP OFFICIAL RELEASE 11 BY WHC DATE JUN 21 1994 <i>Station # 12</i>

0560 8/28/94

ENGINEERING CHANGE NOTICE

Page 2 of 2

1. ECN (use no. from pg. 1)

607432

15. Design Verification Required

☐ Yes☒ No

16. Cost Impact

ENGINEERING

Additional ☐ \$
Savings ☐ \$

CONSTRUCTION

Additional ☐ \$
Savings ☐ \$

17. Schedule Impact (days)

Improvement ☐Delay ☐

18. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 12. Enter the affected document number in Block 19.

SDD/DD	<input type="checkbox"/>	Seismic/Stress Analysis	<input type="checkbox"/>	Tank Calibration Manual	<input type="checkbox"/>
Functional Design Criteria	<input type="checkbox"/>	Stress/Design Report	<input type="checkbox"/>	Health Physics Procedure	<input type="checkbox"/>
Operating Specification	<input type="checkbox"/>	Interface Control Drawing	<input type="checkbox"/>	Spares Multiple Unit Listing	<input type="checkbox"/>
Criticality Specification	<input type="checkbox"/>	Calibration Procedure	<input type="checkbox"/>	Test Procedures/Specification	<input type="checkbox"/>
Conceptual Design Report	<input type="checkbox"/>	Installation Procedure	<input type="checkbox"/>	Component Index	<input type="checkbox"/>
Equipment Spec.	<input type="checkbox"/>	Maintenance Procedure	<input type="checkbox"/>	ASME Coded Item	<input type="checkbox"/>
Const. Spec.	<input type="checkbox"/>	Engineering Procedure	<input type="checkbox"/>	Human Factor Consideration	<input type="checkbox"/>
Procurement Spec.	<input type="checkbox"/>	Operating Instruction	<input type="checkbox"/>	Computer Software	<input type="checkbox"/>
Vendor Information	<input type="checkbox"/>	Operating Procedure	<input type="checkbox"/>	Electric Circuit Schedule	<input type="checkbox"/>
OM Manual	<input type="checkbox"/>	Operational Safety Requirement	<input type="checkbox"/>	ICRS Procedure	<input type="checkbox"/>
FSAR/SAR	<input type="checkbox"/>	IEFD Drawing	<input type="checkbox"/>	Process Control Manual/Plan	<input type="checkbox"/>
Safety Equipment List	<input type="checkbox"/>	Cell Arrangement Drawing	<input type="checkbox"/>	Process Flow Chart	<input type="checkbox"/>
Radiation Work Permit	<input type="checkbox"/>	Essential Material Specification	<input type="checkbox"/>	Purchase Requisition	<input type="checkbox"/>
Environmental Impact Statement	<input type="checkbox"/>	Fac. Proc. Samp. Schedule	<input type="checkbox"/>		<input type="checkbox"/>
Environmental Report	<input checked="" type="checkbox"/>	Inspection Plan	<input type="checkbox"/>		<input type="checkbox"/>
Environmental Permit	<input type="checkbox"/>	Inventory Adjustment Request	<input type="checkbox"/>		<input type="checkbox"/>

19. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision

Document Number/Revision

Document Number Revision

NA

20. Approvals

Signature

Date

Signature

Date

OPERATIONS AND ENGINEERING

Cog./Project Engineer L.C. Hulstrom, H6-03

Cog./Project Engr. Mgr. R.A. Carlson, H6-03

QA

Safety

Security

Proj. Prog./Dept. Mgr.

Def. React. Div.

Chem. Proc. Div.

Def. Wst. Mgmt. Div.

Adv. React. Dev. Div.

Proj. Dept.

Environ. Div.

IRM Dept.

Facility Rep. (Ops.)

Other

ARCHITECT-ENGINEER

PE

QA


Safety

Design

Other

DEPARTMENT OF ENERGY

ADDITIONAL

Date Received: 6-16-94 AM		INFORMATION RELEASE REQUEST		Reference: WHC-CM-3-4	
Complete for all Types of Release					
Purpose			ID Number (include revision, volume, etc.) WHC-SD-EN-TI-173, Rev. 0-B		
<input type="checkbox"/> Speech or Presentation <input type="checkbox"/> Full Paper (Check only one suffix) <input type="checkbox"/> Summary <input type="checkbox"/> Abstract <input type="checkbox"/> Visual Aid <input type="checkbox"/> Speakers Bureau <input type="checkbox"/> Poster Session <input type="checkbox"/> Videotape			<input type="checkbox"/> Reference <input checked="" type="checkbox"/> Technical Report <input type="checkbox"/> Thesis or Dissertation <input type="checkbox"/> Manual <input type="checkbox"/> Brochure/Flier <input type="checkbox"/> Software/Database <input type="checkbox"/> Controlled Document <input type="checkbox"/> Other		
			List attachments. NA		
			Date Release Required June 17, 1994		
Title Data Validation Summary Report - 300-FF-5 Operable Unit - Round 6 Groundwater				Unclassified Category UC- N/A	
Impact Level N/A					
New or novel (patentable) subject matter? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If "Yes", has disclosure been submitted by WHC or other company? <input type="checkbox"/> No <input type="checkbox"/> Yes Disclosure No(s).			Information received from others in confidence, such as proprietary data, trade secrets, and/or inventions? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Identify)		
Copyrights? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If "Yes", has written permission been granted? <input type="checkbox"/> No <input type="checkbox"/> Yes (Attach Permission)			Trademarks? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Identify)		
Complete for Speech or Presentation					
Title of Conference or Meeting NA			Group or Society Sponsoring NA		
Date(s) of Conference or Meeting NA		City/State NA		Will proceedings be published? <input type="checkbox"/> Yes <input type="checkbox"/> No Will material be handed out? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Title of Journal NA					
CHECKLIST FOR SIGNATORIES					
Review Required per WHC-CM-3-4		Yes No		Reviewer - Signature Indicates Approval	
				Name (printed) Signature Date	
Classification/Unclassified Controlled Nuclear Information		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Patent - General Counsel		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Legal - General Counsel		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Applied Technology/Export Controlled Information or International Program		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
WHC Program/Project		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Communications		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
RL Program/Project		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		R.G. McLeod <i>Review not required per telecon 6/14/94</i>	
Publication Services		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		L. Hermann <i>L. Hermann</i> 6/15/94	
Other Program/Project		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Information conforms to all applicable requirements. The above information is certified to be correct.					
References Available to Intended Audience <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Transmit to DOE-HQ/Office of Scientific and Technical Information <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Author/Requestor (Printed/Signature) Date L.C. Hulstrom <i>L.C. Hulstrom</i> 6/14/94				INFORMATION RELEASE ADMINISTRATION APPROVAL STAMP Stamp is required before release. Release is contingent upon resolution of mandatory comments. 	
Intended Audience <input type="checkbox"/> Internal <input type="checkbox"/> Sponsor <input checked="" type="checkbox"/> External Responsible Manager (Printed/Signature) Date R.A. Carlson <i>R.A. Carlson</i> 6/14/94				Date Cancelled Date Disapproved	

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SUPPORTING DOCUMENT		1. Total Pages <i>29</i> <i>30</i>
2. Title Data Validation Summary Report - 300-FF-5 Operable Unit - Round 6 Groundwater	3. Number WHC-SD-EN-TI-173	4. Rev No. 0-B
5. Key Words TMA VOA, Isotopic and Total Uranium analyses - Case #'s A309082, A309049, A310001, A309074, N3-09-066-7245, N3-09-124-7264, and N3-09-151-7268 Weston VOA, Isotopic and Total Uranium analyses - Case #'s 9309L093, 9309L018.	6. Author Name: L. C. Hulstrom <i>LC Hulstrom</i> 6/14/94 Signature Organization/Charge Code 8C300/P25AE	
<p align="center">APPROVED FOR PUBLIC RELEASE 6/17/94 D. Solu</p>		
7. Abstract Hulstrom, L. C., 1994, Data Validation Summary Report - 300-FF-5 Operable Unit - Round 6 Groundwater, WHC-SD-EN-TI-173, Rev. 0, prepared by ENSERCH Environmental (formerly Ebasco Environmental) and Hart Crowser, for Westinghouse Hanford Company, Richland, Washington.		
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9. Impact Level N/A		

RECORD OF REVISION

(1) Document Number

WHC-SD-EN-TI-173

Page 1

(2) Title

Data Validation Summary Report 300-FF-5 Operable Unit Round 6 Groundwater

CHANGE CONTROL RECORD

(3) Revision	(4) Description of Change -- Replace, Add, and Delete Pages	Authorized for Release		
		(5) Cog. Engr.	(6) Cog. Mgr.	Date
0	Initial release EDT 064274, 3/23/94	L.C. Hulstrom	R.A. Carlson	
0-A	Replace Sheet 1 of 3 for Table 2-1 (page 2-8) and Table 4-1 with revised tables. ECN 198009, 4/21/94	L.C. Hulstrom	R.A. Carlson	
0-B RS	Replace Sheet 2 of 3 for Table 2-1 (page 2-9) and Table 4-1 with revised tables. ECN 607432	<i>L.C. Hulstrom</i> L.C. Hulstrom 6/14/94	<i>R.A. Carlson</i> R.A. Carlson 6/14/94	

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Table 2-1. 300-FF-5 Operable Unit Remedial Investigation
 Round 6 Groundwater Volatile Organic Compounds
 Analysis and Qualifier Summary

Sheet 2 of 3

Sample No.	B095K1	B095K9	B095M3	B095M7	B095K8	B095L4	B095L5	B095M6	B095J0
300-FF-5 Compounds of Concern:	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$
Methylene Chloride	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U
1,2-Dichloroethene	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U
Trichloroethene	1 J	4 J	10 U	10 UJ	2 J	2 J	2 J	10 UJ	10 U
Tetrachloroethene	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U
Additional Compounds Originally Detected in Sample:									
Acetone	NR	NR	NR	NR	9 J	NR	6 J	10 UJ	NR
Chloroform	2 J	1 J	NR	NR	11	2 J	2 J	10 UJ	NR

NR - not reported as detected

* - fully validated sample

GW62.WK1

Table 4-1. 300-FF-5 Operable Unit Remedial Investigation/Feasibility Study
Total Uranium
Analysis and Qualifier Summary

Customer I.D. No.	Total Uranium		
	Reported Results in $\mu\text{g/L}$	Qualifier	
TMA Norcal Case N3-09-066-7245			
B095K6	26.00		
B095J5	96.00		
B095J7	110.00		
B095J8	98.00		
B095J9	100.00		
B095L0	41.00		
B095L9	25.00		
B095M0	24.00		
B095M1	24.00		
B095M2	25.00		
B095L1	46.00		
B095L2	43.00		
B095L3	42.00		
TMA Norcal Case N3-09-124-7264			
B095K2	110.00	U	
B095K4	100.00		
B095K5	100.00		
B095K7	24.00		
B095K8	27.00		
B095L4	70.00		
B095L5	70.00		
B095L6	52.00		
B095L7	61.00		
B095L8	70.00		
B095J0	78.00		
B095J2	51.00		
B095J3	71.00		
B095J4	88.00		
B095K0	0.68		
B095K1	33.00		
B095K9	31.00		
B095M3	0.04		
TMA Norcal Case N3-09-151-7268			
B095M4	0.04		U
Weston Case 9309L018			
B095J1	56.00		
Weston Case 9309L093			
B095M5	59.00		